IT Unit 3

Topic 2

# Ch 2, Data Analytics: Drawing Conclusions, Part 1

**Data types & data structures,** p 121-123

1. Why is data categorised into types?

* So that data can be stored efficiently and processed effectively.

1. List some of the most common types. And sub-types.

Data types

Boolean

String (text)

Character

Numeric

Floating point

Date/time

Integer

Byte

Long integer

Timestamp

Time

Short integer

Date

Double precision

Single precision

1. Distinguish between how a spreadsheet (Excel) deals with data types compared with a database (Access).

* A spreadsheet (Excel) essentially guesses what data type to use, and sometimes guesses incorrectly. While databases do not make assumptions, they are more organised and allow the user to depict what data type they want.

1. Describe the data structure of a database file.

* They have formal fields, records and table structures, while spreadsheets such as Microsoft excel do not. They allow for multiple types of data which can be manipulated in a way to effectively present to others so they can understand what the data represents.